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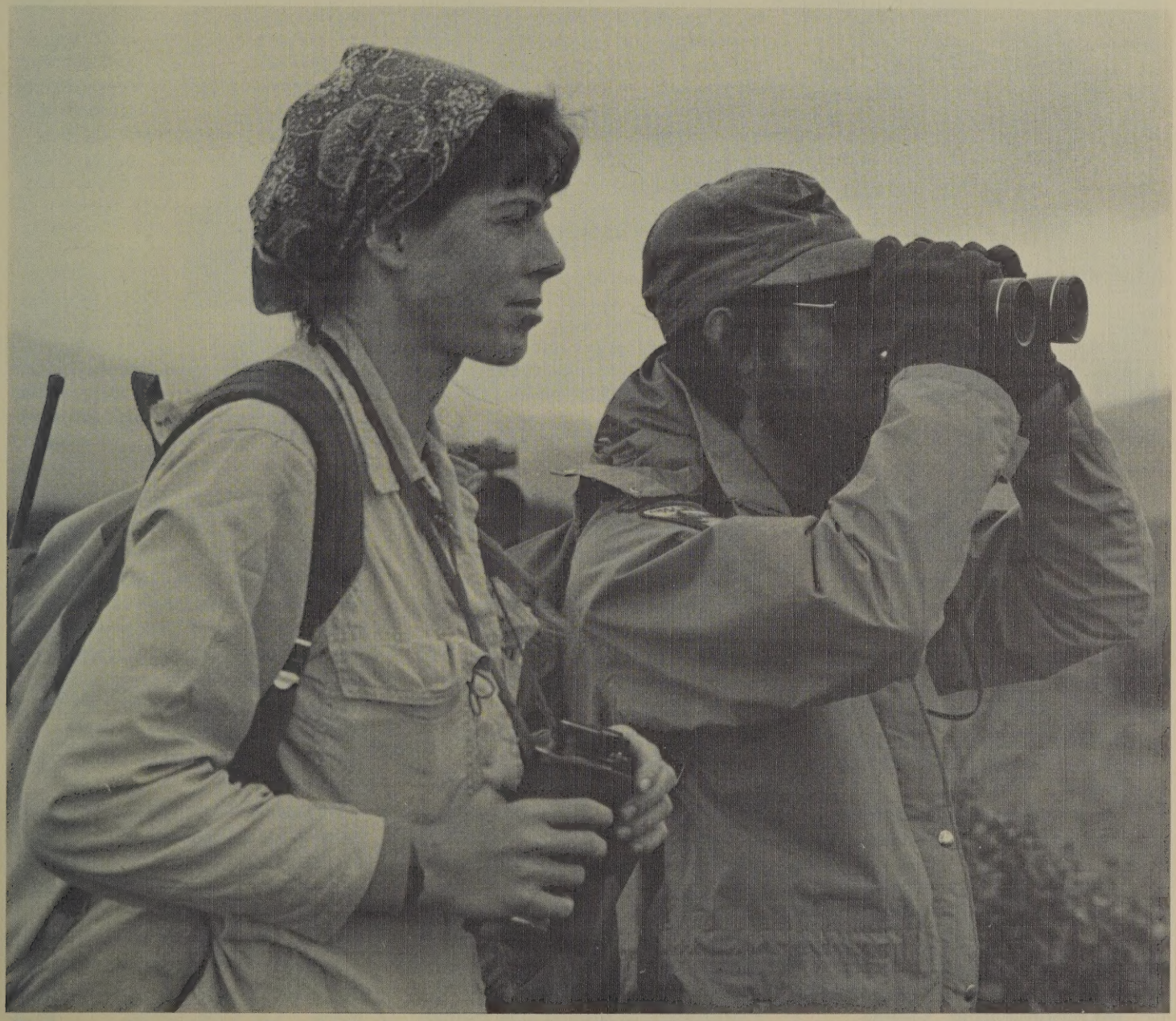
managing public lands for multiple use

Issue 21 January 1990

BLM studies waterfowl populations



BLM researchers scan a tundra pond for ducks, geese and swans. Kobuk District supervisory specialist Herb Brownell and seasonal wildlife biologist Randi Anderson are studying waterfowl populations in McCarthy's Marsh on the Seward Peninsula.

u.s. department of the interior • bureau of land management

BLM biologists count waterfowl on lakes near Nome

BLM Researchers Scott Robinson and Norm Messenger paddle along the edge of a remote tundra lake searching for birds.

How many ducks are produced in McCarthy's Marsh each year? That was the question BLM Wildlife biologist Randi Anderson wanted to answer.

McCarthy's marsh is a 280-square-mile area on the southern part of the Seward Peninsula east of Nome. Anderson's project is being done as part of BLM's ongoing inventory of wildlife on the land it manages.

This remote area has not been studied well.The only previous data on waterfowl is 15 years old, and data from this area can be used to estimate production from other similar areas.

McCarthy's Marsh contains about 154 square miles of waterfowl habitat, 18 square miles of which is prime, 40 moderate and 96 poor quality.

To do the inventory, Anderson sampled 13 square-mile plots. Researchers walked the edges of each lake in the plot, noting each bird they saw, and paying particular attention to broods. Broods indicate the production of the area. Among the birds they saw were mallards, pintails, American widgeons, buffleheads, scaup, old squaw, Canada geese and tundra swans.

Anderson is already able to draw some conclusions. "The preliminary indication is that the production of diving ducks in the marsh is about 300 young this year," Anderson said.

"For dabblers it is about 1,300. And last week we counted 35 pairs of swans. We don't know yet how this compares with surrounding areas, but from early observations, I'd say production this year on the Koyukuk Refuge, bordering McCarthy's Marsh, may be down to a quarter of usual."

Research will continue in order to establish a statistically valid estimate of production. It is important to know how many waterfowl use the area now so BLM managers will know what resources might be affect if, for instance, someone wanted to graze reindeer in the marsh or mine there.

—SM

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BLM readies draft EIS on A-J Mine

The announcement that a Canadian mining company is planning to reopen the Alaska Juneau mine in Southeast Alaska has created quite a stir in Juneau.

The project is seen by proponents as the economic shot in the arm Juneau needs. Opponents question the mine's recreational,social, economic, and environmental impacts.

Echo Bay Exploration, Inc., spent $18 million dollars over the last three years evaluating and rehabilitating the A-J mine, then in March 1989 applied for a right-of-way from BLM for a road, dam and tailings pond on about 700 acres of public land administered by BLM. The area is currently covered by a federal power site withdrawal.

A draft environmental impact statement on the project is scheduled for publication in January. BLM is the lead agency in preparing the statement , which is being written by a third party contractor, James M. Montgomery. The EIS will analyze the company's request for authorizations from BLM for a right-of-way, from the U.S. Army Corps of Engineers for fill placement and activities in wetlands and navigable waters, from the Environmental Protection Agency for air and water discharges, and from the Federal Energy Regulatory Commission for development of a hydroelectric power project.

Once the world's largest low-grade underground gold mine, the old A-J Mine is located about two and a half miles from downtown Juneau. It operated from 1893 until 1944 and produced 3.52 million ounces of refined gold. During peak production, 1,000 miners mined 12,000 tons of ore daily.

Echo Bay hopes to reopen the old mine to produce 364,000 ounces of refined gold annually. In the process, some 365,000 tons of waste rock and 8.2 million tons of tailings would also be produced. The mine would employ 450 workers at the proposed production rate of 22,500 tons per day for about 13 years.

The operation would involve the construction of a 17-acre tideland fill in Gastineau Channel between two existing fills. Here a fuel storage area, offices, a warehouse, an assay laboratory, chemical processing facilities for crushed ore, and a refinery would be located.

A two-mile-long tunnel, to be named the Bradley Adit, would be constructed from the surface facility to the mid point of the ore body beneath Mt. Roberts. Just off this adit would be an underground ore-crushing mill and diesel electrical generation facilities.

The adit would serve as the principal access for miners and for the transport of gold-bearing ore to the crushing mill.

Ore would be mined by a process known as longhole open stoping, in which the rock is drilled and blasted to create a large, rectangular cavern, or stope. Broken ore would be hauled to the underground mill, where it would be crushed and put into big tanks. Here a chemical process would float and concentrate the ore. These gold concentrates would then be sent to the refinery at the surface facility.

At the refinery, some of the concentrates would be processed into bullion. The remainder would go to vats where a carbon-in-leach process would allow recovery of the remaining gold. This process uses sodium cyanide in association with activated carbon granules to dissolve the gold, then chemically converts the sodium cyanide to sodium cyanate (a stable, non-toxic, biodegradable compound).

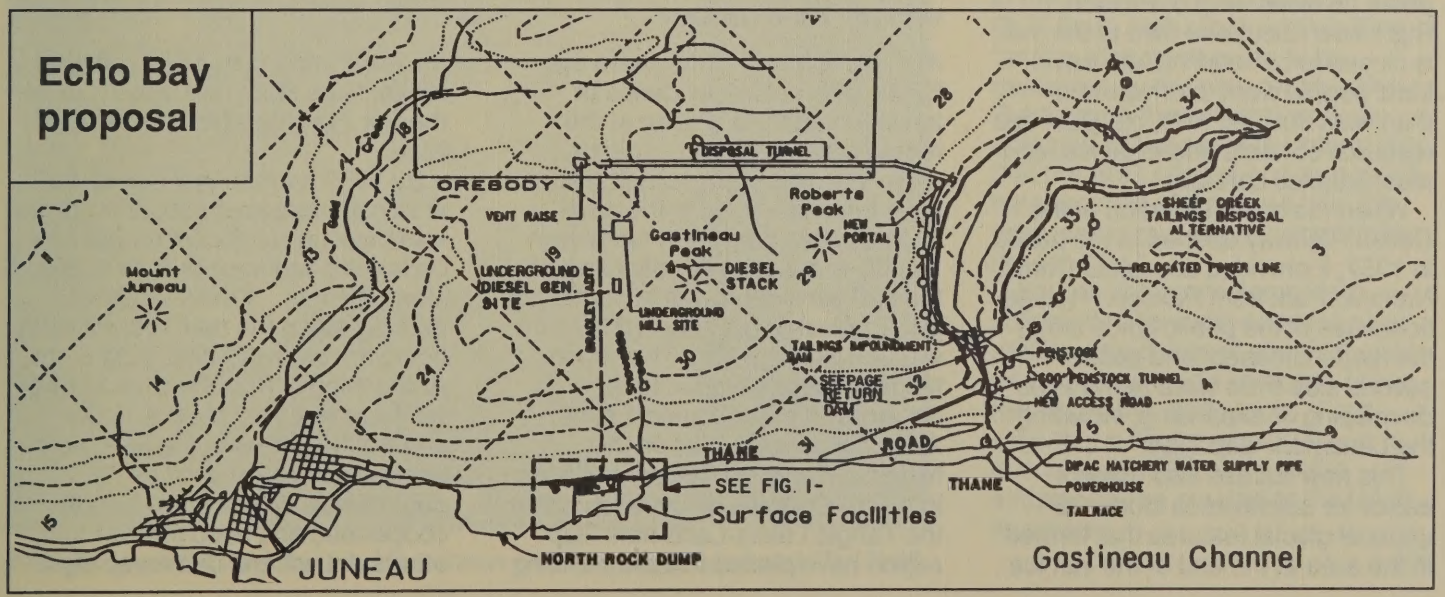
After the gold has been removed, the tailings would be sent back through the adit for disposal.

The company proposes to construct a tailings dam and hydroelectric facility in the Sheep Creek valley.

Tailings would be disposed of in the reservoir behind the dam. Some of the large-size waste rock would be used as fill for the surface facility and some would be placed in Sheep Creek Valley.

Project coordinator David Dorris says, "I plan to meet with the other agencies in early December to get their input on the draft EIS, resolve any differences and develop preferred alternatives so the EIS will be ready for release in January."

—DA/JM



When spears and flyrods cross

Landmark Gap Trail illustrates multiple use dilemma

You're all set to go fishing. You pick out a lake that is off the main highway a few miles so you can get away from it all. You know you'll need four-wheel-drive to get there and you go prepared. But just a mile from the lake there's a barricade and a sign explaining that you'll have to walk the rest of the way. First you get angry. Then you start rationalizing. "Who cares if I go around the berm? What difference does it make? Why are there these restrictions out in the middle of nowhere?"

Managing lands under the multiple use concept is never easy and often is downright difficult. With more than 90 million acres of public land under its administration, BLM usually can find room for everyone. But sometimes two groups want to be in the same place at the same time. That's when multiple-use management calls for lots of creativity, cooperation and understanding on everyone's part.

The presence of significant archaeological sites along the Landmark Gap Trail, an area where off-road vehicle use is increasing, offers a good example. The trail is a side route off the Denali Highway, about 25 miles west of Paxson. Right now about one mile of the trail is closed to off-road vehicle travel. Most people want to drive rather than walk that last mile, but BLM has resource conflicts and legal issues it must balance carefully.

When the eastern portion of the Denali Highway opened to the public in 1957, it provided access to Denali National Park from Paxson. Recreational use of the public lands along the road increased, and soon several side trails were found to be developing or expanding, including the Landmark Gap Trail.

This new access also made it easier for scientists to study the unusual glacial features that formed in the area at the end of the last Ice Age, more than 12,000 years ago. By the late 1950's, evidence of ancient human habitation of the region was also found. To date, more than 450 archaeological sites have been identified in the area.

Glennallen District archaeologist Pete Bowers photographing an artifact found within the Landmark Trail.

Some sites date back more than 10,000 years and provide some of the earliest evidence of humans, not just in Alaska, but also in the entire western hemisphere. The importance of these sites led to the designation of the Tangle Lakes Archaeological District on the National Register of Historic Places in 1971. Ongoing discoveries within the Tangle Lakes-Landmark Gap region have placed this area among the most important archaeological areas in the state and made it one of the few Alaskan sites known worldwide.

By 1980 recreational use of the area had increased substantially and was causing significant damage to certain archaeological sites in and along the trail. "One site, about midway along the trail, was routinely being driven over," said BLM State Archaeologist Bob King, "even after BLM made a very short re-route around the site, with the re-route being every bit as good as the original trail. While many people cooperated and used this re-route, others did not and destroyed signs

and barricades (a federal offense) as well as a portion of the site."

BLM soon found itself in a management dilemma. The National Historic Preservation Act directed federal agencies to protect historic and archaeological sites from deterioration resulting from federal actions, or even inaction. Yet how could the sites at Landmark Gap be protected while recreational off-road vehicle use increased?

The solution came in 1980, when the BLM, the National Advisory Council on Historic Preservation and the Alaska State Historic Preservation Officer agreed that the 10 trails in the district would be examined for potential archaeological sites before being opened to motorized vehicle use. BLM then spent considerable time and effort to clear the trails and nine of the 10 trails were soon reopened to public use.

In September 1980 the archaeological district was designated as a "limited use" area; that is, motorized vehicles were to be allowed only on the trails that had been "cleared." But part of the Landmark Gap Trail remained closed to protect five sites that needed more evaluation, including some excavation.

However, no money has been available to finish this work. No one really likes the situation. Some recreationists complain about the closure and BLM rangers have to spend time and effort to enforce it. Under the circumstances, BLM has no alternative but to follow Congressional direction and protect the sites.

"In the meantime, we are asking people to cooperate by parking at the point of closure midway along the trail and walking the remainder of the way to Landmark Gap Lake," says King.

The Tangle Lakes area is open to motorized off-road vehicle use in the winter after there is sufficient snow cover to protect the ground.

—EB

BLM Ranger Bob Posey (left) and Pete Bowers, midway along Landmark Gap Trail.

Ancient blade fragment found along Landmark Gap Trail

Archaeologists excavate sites in Tangle Lakes Campground

As part of the Recreation 2000 program, BLM is upgrading or refurbishing all its campgrounds and facilities in the state. Last summer, a new boat ramp was installed in the Tangle Lakes Campground. Earlier the road was rerouted and some camping sites upgraded. All these developments are within the Tangle Lakes Archaeological District. Before this work could be done, the area had to be cleared archaeologically, with sites mapped and evaluated.

Archaeologists hired under a BLM contract spent last summer working in the area. "It was a tradeoff," said BLM State Archaeologist Bob King, "as the sites were going to be destroyed by the new construction. But through the contract work we obtained all the essential information that the sites offered and as a result have learned more about how the area was occupied by humans after the Ice Age."

Several thousand items were collected. The most common were small waste flakes of chert left over when people made scrapers, lance tips and other stone tools. King says that a final summary report is due in early 1990 and that the artifacts will be curated at the UA-F museum.

—EB

Chevac Natives hear BLM explain allotment process

John Pinguyak, Chairman of the Chevak Company Corporation, translates the BLM briefing into Inupiat.

"We want to know more about the laws and how we can keep control of our own lands"

—Chevac Elders

We slipped into the meeting hall carefully, trying to avoid disturbing the man who spoke rapid-fire Inupiat into the mike.

To me, the combination of hard consonants and glottal stops from deep within the speaker's throat sound similar to Russian or a Slavic tongue. Occasionally an English word or two, such as "hazardous waste, DEC, toxic materials, contingency plans," was spoken.

The group of thirty-plus people in the room were quiet. They obviously respected the speaker's right to be heard. Although we couldn't understand the words, we were impressed by the calm flow of communications between the speakers and audience.

Members of the audience came forward to speak their minds freely about any given issue. Each was afforded the same polite attention by the audience. Elders of the Chevac Village Corporation were having a conference.

A month earlier, BLM had been invited to come and present information on the approval process for Native allotment applications.

Ann Johnson; the branch chief of Calista Adjudication, Cadastral surveyor John Farnsworth; and Anchorage District realty specialist Russ Blome, all veteran speakers before groups like this, explained the intricacies of getting a Native allotment completed.

Speaking through an interpreter in short, easily translated sentences, each BLM representative discussed the part of the process which he or she dealt with.

Farnsworth talked about the priority system Cadastral survey uses in planning the geographic areas, or "windows," to be surveyed during a particular field season. He said that even after the field survey, it usually takes a year and a half to three years for the patent (official deed from the U.S.) to be issued.

Blome described the field exam process and exactly what BLM is looking for, including gravesites, food-gathering or food-processing areas, and general evidence of past use.

Johnson explained a wide range of issues to the group, eliciting a number of questions.

"What happens to a Native allotment application when the Native dies before receiving it?" "Can 14(c) lands be transferred to Traditional Councils?" "Can gravel removal be taxed?"

All questions were answered to the group's satisfaction. A statement by the Council Elders was read and translated. In essence, it said, "Subsistence is our top priority. We have been hunting and fishing in harmony with the land for thousands of years, without the benefit of any imaginary lines on the ground.

"Today we see people putting in boundaries for federal, state, regional, village and Native allotment holdings. We are worried that we are going to be excluded from our traditional hunting and fishing areas.

"We want to know more about the laws and how we can keep control of our own lands. Each of our elders had respect for the land, the wildlife, and the foods the land offers. Their desire to survive and live in harmony with the land lives on in us.

"Thank you for your interest and support in getting matters settled for our lands."

As we walked the two hundred yards back up the hill to the airstrip, a cold damp wind carrying quarter-sized snowflakes blew in our faces .

During the Mark Air flight back to Bethel, I thought about these people and about the great differences in lifestyle between people in remote parts of Alaska and the rest of America, differences required by nature above the Arctic Circle.

Would I and my family be able to cope with the rigors of life in the northern bush? Maybe, maybe not. For sure this country and its never-ending cycle of life would dominate those who live there.

This kind of work is unique to the Bureau. The opportunities to make significant contributions to tough problems still exist here. The Bureau of Land Management has a large part to play in the successful conclusion of the Native land settlement question.

In the words of BLM's former State Director Penfold in his departure speech, "BLM has got to keep faith with Alaska's Natives. We've got to be the ones who remember the promises made to them and to the State."

—Rob McWhorter

The highest overall priority for the Alaska conveyance program is processing individual Native allotment applications. In fiscal year 1989, 755 allotments were conveyed to individuals. To deal with the huge backlog of 10,000 applications requires strict coordination. Field checks must be done by BLM district realty specialists and surveys by cadastral surveyors. Afterwards, it usually takes from 18 to 36 months to complete the adjudication work necessary to grant a patent to the Native allotee.

Easement markers may save lives

An $11 stake may save a life, if it marks an easement across the snow-covered, featureless tundra.

BLM's purpose in marking easements is to identify them so the public knows where it is legal to cross private land without trespassing. But safety is often an important side benefit.

Every year people get lost on the tundra in winter. Boyce Bush, a realty specialist with BLM's Kobuk District , heard about such a tragedy last summer while he was working on St. Lawrence Island.

Bush reports, "A man on St. Lawrence Island was telling me that last winter another man and his son were snowmachining near the rocky cliffs along the coast, in white-out conditions. I guess they got off the trail. The father was in the lead and the son was behind him. The father went over a cliff and the son went behind him. The father was injured, but the son was killed."

BLM's marked easements are providing landmarks in a land that is often dark, cold and featureless.

Last summer BLM Kobuk District employees marked 76 miles of easements with bright yellow stakes with reflective stickers that show up brightly at night. There are about 10 stakes per mile in open areas, more if tall brush obscures them.

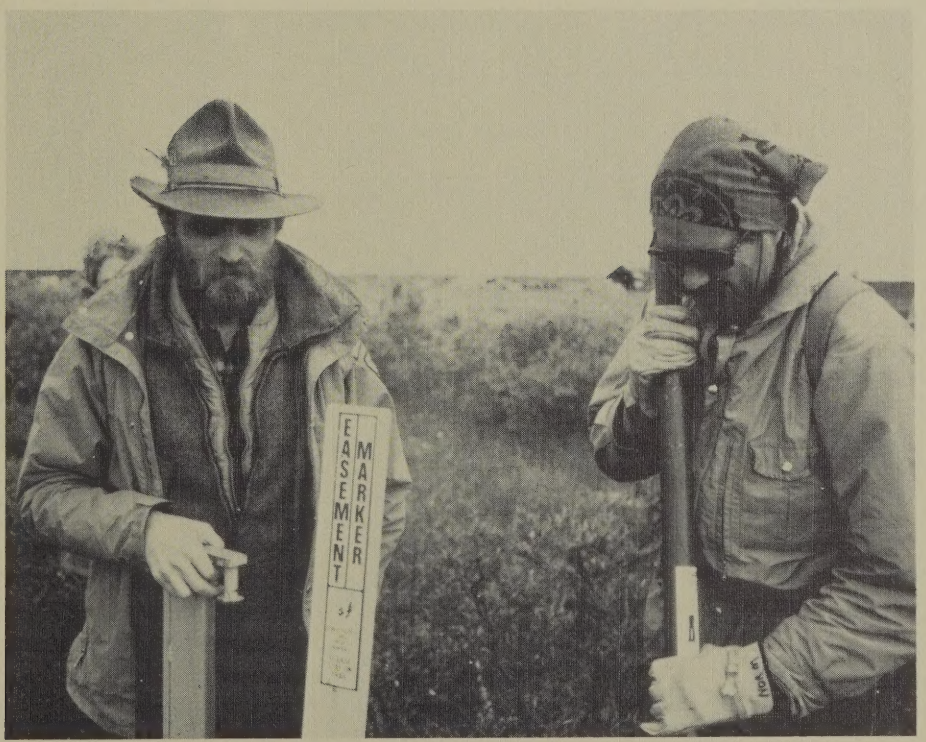
BLM has identified over 400 easements comprising about 1,000 miles of trails and roads in the Kobuk District alone. The easements allow people to cross Native lands to reach public lands, and are required under section 17(b) of the Alaska Native Claims Settlement Act.

BLM employees can place stakes about a mile per hour on foot in good terrain, three miles per hour using a helicopter. "These stakes have ice hooks on the end that makes them harder to pull out—it keeps the frost action from jacking them out of the ground" Bush said.

Priorities for staking are determined through consultation with the village and regional corporations. Easements are being marked as rapidly as budget allows.

The main purpose of marking these easements is to identify them so that the public knows where it is legal to cross private land without trespassing. But safety is an important side benefit. Perhaps an easement stake will save a life this winter.

—SM



Boyce Bush, a realty specialist in BLM's Kobuk District, and Norm Messenger, a natural resource specialist in the Nome office, installed easement markers on the Seward Peninsula.

frontier flashes

BLM has published a **proposed resource management plan and final environmental impact statement** for more than 6 million acres of federal land in and near the Trans-Alaska Pipeline Utility Corridor.

The plan would designate 13 Areas of Critical Environmental Concern (ACECs) and would make approximately 700,000 acres available for selection or exchange. It emphasizes development of the recreational opportunities within the corridor. Copies are available at the BLM public rooms in Anchorage at the Federal Building, 222 W 7th Ave., (phone 271-5960) and in Fairbanks at 1150 University Avenue (phone 474-2301).

▽

Volunteers contributed 40,000 hours of labor worth $500,000 to BLM-Alaska in fiscal year 1989.

▽

BLM and the Alaska Department of Natural Resources have agreed to open a **joint pipeline office** to administer federal right-of-way grants and state right-of-way leases. These two agencies are the primary land managers for areas crossed by the Trans-Alaska pipeline. The new office will also be a focal point for response in the event of a crisis and will oversee any future pipeline construction. It will be staffed by both federal and state employees.

▽

Key representatives of numerous state, federal, and private organizations turned out in late October to honor and say farewell to **Michael J. Penfold**, former state director for BLM in Alaska. Penfold has been selected as BLM's assistant director for lands and renewable resources.

Another former BLM Alaska State Director, **Curtis McVee**, has been sworn in as federal co-chairman of the Alaska **Land Use Council**. McVee has already held a meeting of the full council, the first one held since 1988.

▽

Secretary of the Interior Manuel Lujan, Jr., has appointed **three** Fairbanks residents to the **Northern Alaska Advisory Council**. Doyon land specialist Gary Lee was reappointed to represent the public at large; Charles P. Boddy, regulatory compliance manager for Usibelli Coal Mine, Inc., will represent nonrenewable resource interests; and Fairbanks North Star Borough Assemblywoman Bonnie Williams will serve as an elected official, general purpose government. The council advises the three BLM district managers in northern Alaska.

The Secretary also reappointed all **Southern Alaska Advisory Council** members.

▽

After Russians carried copies home from an arctic conference, delegates to an international geophysical conference scooped up 300 copies, other BLM offices asked to use it as a model, and 6000 copies had been sent out, BLM's Alaska minerals division knew they had a hit.

What is this hot item? **Placer Mining in Alaska: A Guide to Mitigation and Reclamation.** Illustrated with colorful charts and drawings, the booklet shows ways to handle drainage problems, deal with permafrost, and minimize environmental disturbance during operations. For more information or a copy, call or write the BLM public room in either Anchorage or Fairbanks.

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